

### REMARKS

We are submitting formal drawings to address the Examiner's request in paragraph 3 of the office action. We have also corrected the misspelled word pointed out by the Examiner in claim 1.

We have also amended independent claims 1, 7, and 18 to more particularly recite that the image size detection circuitry, is responsive to electrical signals received from the electronic camera and to changes in an actual image area within a total image area, for continuously identifying (measuring in claim 18) the actual image area within the total image area of the image. We have also amended independent claim 13 to recite that the method of controlling an electronic shutter includes continuously identifying, in response to the electrical signals and changes in an actual image area within a total image area, the actual image area within the total image area of the image sensor. These amendments are supported by applicants' specification at page 15, lines 15-18 and page 16, lines 7-15.

### Prior Art Rejections

#### *Independent Claims 1, 17 and 18*

The Examiner rejected claims 1-4, 6-10, 12, 18-21, and 23 as anticipated by Buchin (U.S. 5,475,420). The Examiner also rejected dependent claims 5, 11, and 22 as unpatentable over Buchin. We submit however that Buchin neither describes nor suggests image size detection circuitry, responsive to electrical signals received from the electronic camera and to changes in an actual image area within a total image area, for continuously identifying (measuring in claim 18) the actual image area within the total image area of the image, as recited in amended independent claims 1, 7, and 18.

As described in their specification (see page 15, lines 15-18 and page 16, lines 7-15), applicants' image size detection circuitry continuously identifies (or measures) the actual image area within the total image area of the image. This capability is particularly advantageous in endoscopic applications, for example, in which an optical zoom assembly is positioned between

the electronic camera and endoscope to vary the magnification of an observed image. In particular, as the operator manipulates the optical zoom assembly to "zoom" in or out, the active image area within the total image area varies. Because the image size detection circuitry operates in a continuous manner, brightness of the image can be controlled during the variations.

Buchin is silent as to whether his processing electronics, in response to changes in an actual image area within a total image area, continuously identifies (or measures) the actual image area within the total image area of the image. For this reason alone, we submit that independent claims 1, 7 and 18 are patentably distinct from Buchin. We further submit that because claims 2-6 depend from claim 1; claims 8-12 depend from claim 7; and claims 19-23 depend from claim 23, these dependent claims are patentable for at least the same reason that independent claims 1, 7 and 18 are patentable.

*Independent claim 13*

The Examiner rejected claims 13-15 and 17 as anticipated by Buchin. The Examiner also rejected dependent claim 16 as unpatentable over Buchin. We submit however that Buchin neither describes nor suggests a method of controlling an electronic shutter includes continuously identifying, in response to the electrical signals and changes in an actual image area within a total image area, the actual image area within the total image area of the image sensor, as recited in amended independent claim 13. As discussed above, Buchin does not provide any hint for operating his processing electronics in this manner. Because claims 14-17 depend from claim 13, these dependent claims are patentable for at least the same reason that independent claim 13 is patentable.

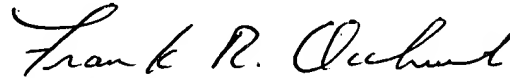
Applicant : Michael Burnett et al.  
Serial No. : 09/177,837  
Filed : October 23, 1998  
Page : 11 of 11

Attorney's Docket No.: 00167-318001 / 02-31-0258

Enclosed is a Petition for Three Month Extension of Time with a check for \$950.00 for the required fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: April 23, 2004



Frank R. Occhiuti  
Reg. No. 35,306

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906